

ABSTRACT

A wavelength converting element is provided in which a fundamental wave with respect to an optical crystal substrate and a peak of a vertical transverse mode of a second harmonic are made to coincide, the converting efficiency is good, and a beam shape which enables good joining to a lens or an optical fiber is obtained. Given that an angle formed by a surface of the optical crystal substrate and a C axis of the optical crystal substrate is θ , a period at which inverted domains are formed is p , and a distance from a distal end of a comb-shaped electrode for forming the inverted domain to a central position of a waveguide is G , in the ion implantation, a concentration peak of the ion implantation is formed at a distance of substantially $(G \cdot \tan \theta + p/4)$ from the surface of the optical crystal substrate.